

Title (en)
TARGET BIOLOGICAL MOLECULE IDENTIFICATION METHOD, BEADS FOR TARGET BIOLOGICAL MOLECULE IDENTIFICATION USE, SET OF BEADS, AND TARGET BIOLOGICAL MOLECULE IDENTIFICATION DEVICE

Title (de)
VERFAHREN ZUR IDENTIFIZIERUNG VON BIOLOGISCHEN ZIELMOLEKÜLEN, KÜGELCHEN ZUR VERWENDUNG BEI DER IDENTIFIZIERUNG VON BIOLOGISCHEN ZIELMOLEKÜLEN, KÜGELCHEN-SET UND VORRICHTUNG ZUR IDENTIFIZIERUNG VON BIOLOGISCHEN ZIELMOLEKÜLEN

Title (fr)
PROCÉDÉ D'IDENTIFICATION DE MOLÉCULE BIOLOGIQUE CIBLE, BILLES D'UTILISATION D'IDENTIFICATION DE MOLÉCULE BIOLOGIQUE CIBLE, JEU DE BILLES, ET DISPOSITIF D'IDENTIFICATION DE MOLÉCULES BIOLOGIQUES CIBLES

Publication
EP 3467121 A4 20200212 (EN)

Application
EP 17802880 A 20170525

Priority
• JP 2016104290 A 20160525
• JP 2017019530 W 20170525

Abstract (en)
[origin: EP3467121A1] A method for identifying a target biological molecule includes a step (a) of bringing a sample containing a biological molecule into contact with a plurality of beads on which a ligand capable of binding to one of a plurality of target biological molecules, and a nucleic acid for bead identification which has a specific sequence for each type of the ligand are immobilized; a step (b) of arranging the plurality of beads which have been brought into contact with the sample in each of individual reaction vessels for each bead; a step (c) of adding a reagent necessary for a nucleic acid elongation reaction to the reaction vessel in which the bead is arranged; a step (d) of performing the nucleic acid elongation reaction in the reaction vessel in which the bead is arranged; a step (e) of measuring an amount of protons generated in each of the reaction vessels during the nucleic acid elongation reaction; a step (f) of determining the occurrence or non-occurrence of nucleic acid elongation in each of the reaction vessels based on the amount of protons generated; and a step (g) of performing a nucleic acid elongation reaction in the reaction vessel in which the bead is arranged using the nucleic acid for bead identification as a template, identifying the sequence of the nucleic acid for bead identification for each reaction vessel based on the amount of protons generated in each reaction vessel during the nucleic acid elongation reaction using the nucleic acid for bead identification as a template, and identifying the type of the ligand for each reaction vessel based on the sequence of the nucleic acid for bead identification identified for each reaction vessel.

IPC 8 full level
C12Q 1/6869 (2018.01); **C12M 1/00** (2006.01); **C12Q 1/6874** (2018.01); **G01N 33/68** (2006.01)

CPC (source: EP US)
C12M 1/00 (2013.01 - EP US); **C12Q 1/68** (2013.01 - US); **C12Q 1/6806** (2013.01 - US); **C12Q 1/6837** (2013.01 - US); **C12Q 1/6853** (2013.01 - US); **C12Q 1/686** (2013.01 - US); **C12Q 1/6869** (2013.01 - EP US); **C12Q 1/6874** (2013.01 - EP); **G01N 27/4145** (2013.01 - US); **G01N 27/4146** (2013.01 - US); **G01N 33/68** (2013.01 - EP US)

C-Set (source: EP)
1. **C12Q 1/6869** + **C12Q 2527/119** + **C12Q 2563/116** + **C12Q 2563/149** + **C12Q 2563/179** + **C12Q 2565/519** + **C12Q 2565/607**
2. **C12Q 1/6874** + **C12Q 2527/119** + **C12Q 2563/116** + **C12Q 2563/149** + **C12Q 2563/179** + **C12Q 2565/519** + **C12Q 2565/607**

Citation (search report)
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• [X] WO 2015166768 A1 20151105 - UNIV KANAZAWA NAT UNIV CORP [JP]
• [X] WO 2014124338 A1 20140814 - 10X TECHNOLOGIES INC [US]
• [X] JITAO DAVID ZHANG ET AL: "Highly sensitive amplicon-based transcript quantification by semiconductor sequencing", BMC GENOMICS, BIOMED CENTRAL, vol. 15, no. 1, 5 July 2014 (2014-07-05), pages 565, XP021189996, ISSN: 1471-2164, DOI: 10.1186/1471-2164-15-565
• [X] MARKO NICHOLAS F ET AL: "Nanotechnology in proteomics", EXPERT REVIEW OF PROTEOMICS, FUTURE DRUGS LTD., LONDON, GB, vol. 4, no. 5, 1 October 2007 (2007-10-01), pages 617 - 626, XP001538495, ISSN: 1478-9450, DOI: 10.1586/14789450.4.5.617
• See references of WO 2017204294A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
EP 17802880 A 20170525; JP 2017019530 W 20170525; JP 2018519606 A 20170525; US 201816192695 A 20181115